Name: Date:
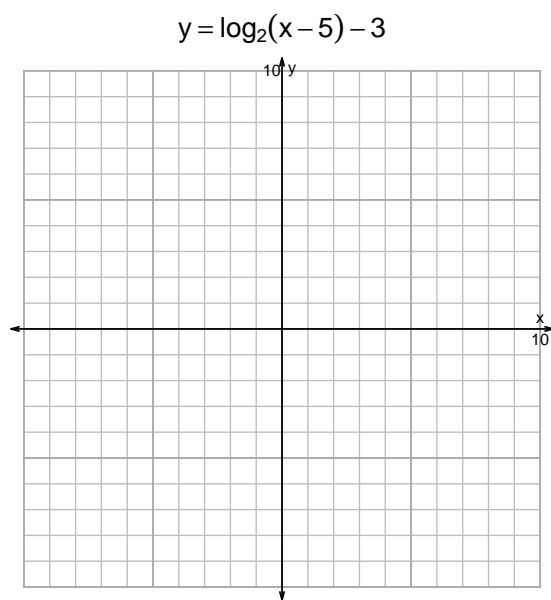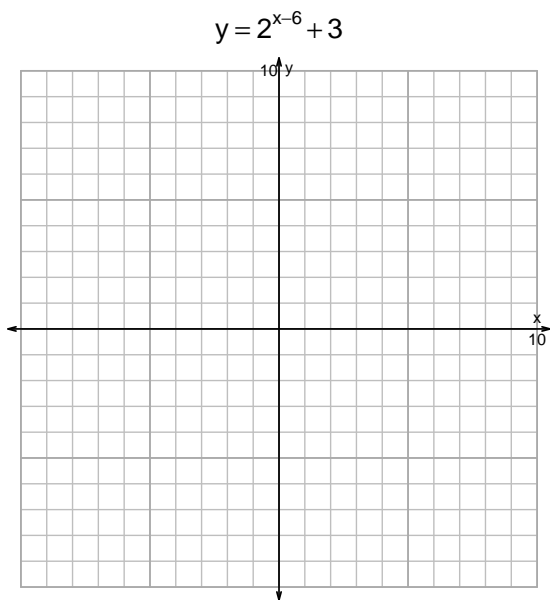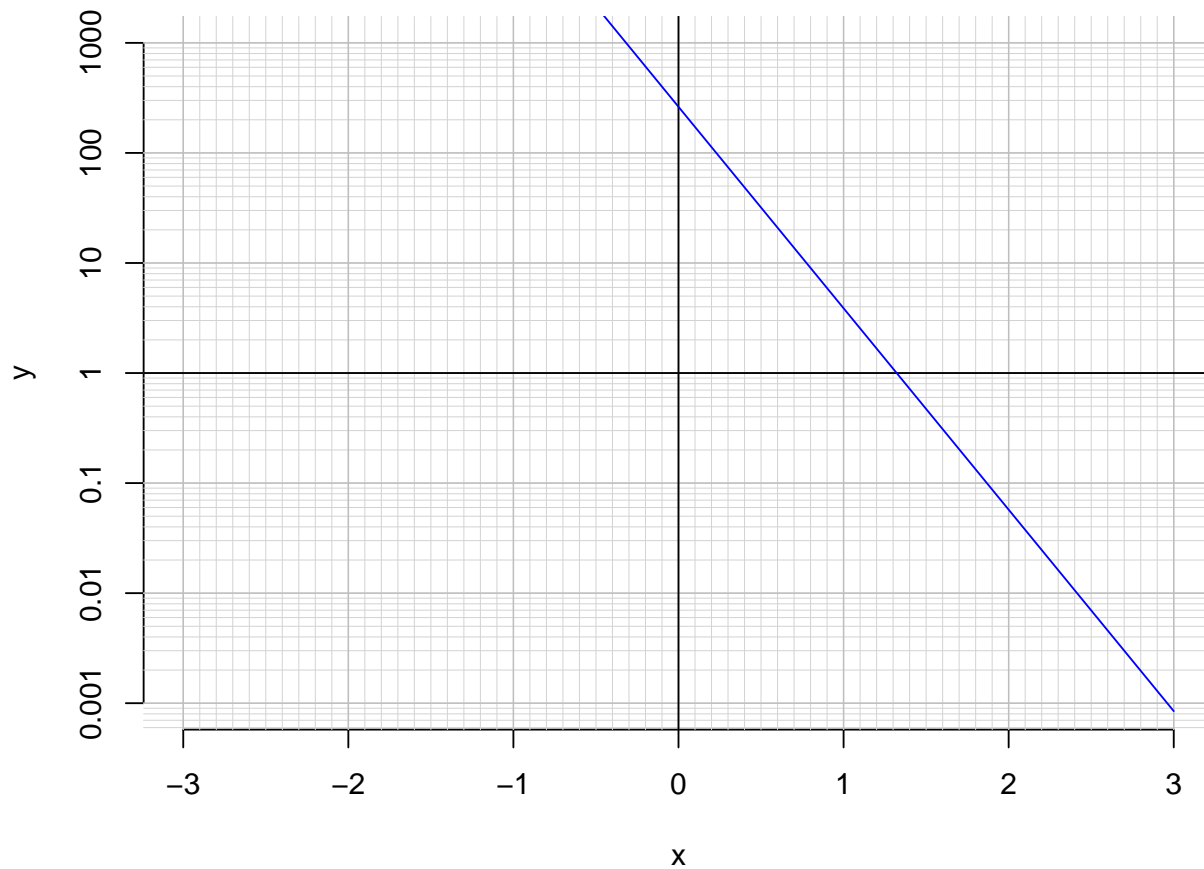_____   _____

s18quiz: EXP LOG (QUIZ v248)

1. Graph $y = 2^{x-6} + 3$ and $y = \log_2(x - 5) - 3$ on the grids below. Also, draw any asymptotes with dotted lines.

$y = 2^{x-6} + 3$ $y = \log_2(x - 5) - 3$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$23 = \left(\frac{3}{4}\right) \cdot 10^{-5t/7}$$

3. An exponential function $f(x) = 262 \cdot e^{-4.21x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(2.7)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(400)$.